



# **PIER –Environmental Area Research to Support Avian Siting Guidelines for Wind Facilities**

**August 28, 2006**

Kelly Birkinshaw  
Program Manager



# PIER-EA Research Provides Information to Help Guide Policy



- Research coordinated but independent of guideline development
- Policy analysis and research operate under vastly different timelines
- Research results will be valuable for future revisions/updates



# Provide empirical foundation for Guidelines, Monitoring Programs, and Mitigation

- R&D Committee Allocated \$1M Program for 2006/07
- **Goal:**
  - Inform wind siting/permitting guideline policy and stakeholders.
- **Objectives:**
  - Facilitate appropriate siting of wind development
  - Improve methods and metrics
  - Assess effectiveness of mitigation measures



# There are several key questions



- What is the threshold of bird use and behavior that triggers a problem?
- How well does pre-construction analysis predict post construction impacts?
- What mitigation could be effective and how do we measure success?

# Potential Areas of Research

- What are the optimal distances and time intervals for assessing bird use and behavior?
  - Can observations be improved with instrumentation?
  - What are the tradeoffs between cost and accuracy/precision
- How can we improve upon estimating impacts?
  - What are optimal search intervals, scavenger detection protocols, monitoring duration?
- What are the best methods and instruments for detecting nocturnal activity?



# Roadmap Process Establishes Research Agenda



## Roadmap objectives:

- Provide forum for stakeholders to participate in framing research agenda
- Relative to selected issues, identify gaps in ongoing research
- Facilitate collaborations with other research institutions, agencies, and operators
- Define short, mid, and long-term goals, timeframes, budgets, and activities
- Balance timeframes, risk, and provide the greatest public benefit



# Proposed Timeline for Developing Roadmap



- **Current:** Staff engaged in guideline development, reviewing literature, consulting experts.
- **September:** Prepare draft list of research needs and distribute
- **October:** Scoping Workshop to discuss, add, delete, and prioritize needs
- **January:** Release Draft Roadmap
- **February:** Workshop
- **March:** Final Roadmap
- **3rd Q 07:** Begin Research

## Contact Information

- **Linda Spiegel**  
lspiegel@energy.state.ca.us  
(916) 654-4703
- **Melinda Dorin**  
mdorin@energy.state.ca.us  
(916) 654-4024
- **Kelly Birkinshaw**  
kbirkins@energy.state.ca.us  
(916) 654-4542

